# (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

### (19) World Intellectual Property Organization

International Bureau



## 

(43) International Publication Date 28 October 2004 (28.10.2004)

### (10) International Publication Number WO 2004/092528 A3

(51) International Patent Classification7:

(21) International Application Number:

PCT/US2004/010762

E21B 23/02

(22) International Filing Date:

6 April 2004 (06.04.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/461,038

7 April 2003 (07.04.2003)

- (71) Applicant (for all designated States except US): ENVEN-TURE GLOBAL TECHNOLOGY [US/US]; 16200 A Park Row, Houston, TX 77084 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BRISCO, David, Paul [US/US]; 405 Westridge Drive, Duncan, OK 73533 (US). WATSON, Brock, Wayne [US/US]; 2535 Marsh Lane #1004, Carrollton, TX 75006 (US). TREECE, Harold [US/US]; 213 Ridgecrest Drive, Duncan, OK 73533 (US).
- (74) Agent: MATTINGLY, Todd; Haynes and Boone, LLP, Suite 3100, 901 Main Street, Dallas, TX 75202 (US).

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, . GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Declaration under Rule 4.17:

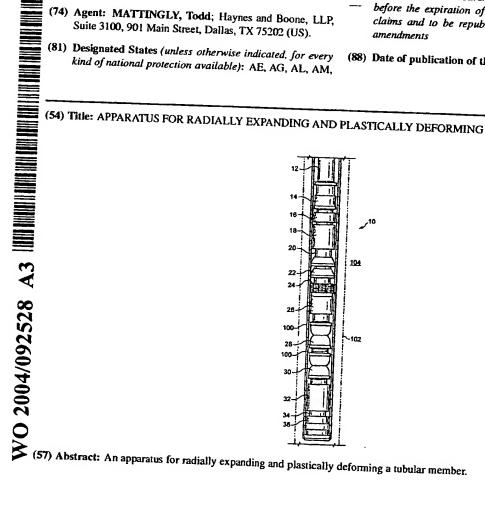
of inventorship (Rule 4.17(iv)) for US only

#### Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of
- (88) Date of publication of the international search report: 10 November 2005

[Continued on next page]

(54) Title: APPARATUS FOR RADIALLY EXPANDING AND PLASTICALLY DEFORMING A TUBULAR MEMBER



### INTERNATIONAL SEARCH REPORT

International application No.

A. CLASSIFICATION OF SUBJECT MATTER  IPC(7) : E21B 23/02 US CL : 166/207,55.7 According to International Patent Classification (IPC) or to both national classification and B. FIELDS SEARCHED  Minimum documentation searched (classification system followed by classification symbols U.S.: 166/207,55.7,380,384  Documentation searched other than minimum documentation to the extent that such documentation searched other than minimum documentation to the extent that such documentation data base consulted during the international search (name of data base and, where Please See Continuation Sheet	s)
US CL : 166/207,55.7  According to International Patent Classification (IPC) or to both national classification and  B. FIELDS SEARCHED  Minimum documentation searched (classification system followed by classification symbols U.S.: 166/207,55.7,380,384  Documentation searched other than minimum documentation to the extent that such documentation	s)
According to International Patent Classification (IPC) or to both national classification and B. FIELDS SEARCHED  Minimum documentation searched (classification system followed by classification symbols U.S.: 166/207,55.7,380,384  Documentation searched other than minimum documentation to the extent that such documentation	s)
Minimum documentation searched (classification system followed by classification symbols U.S.: 166/207,55.7,380,384  Documentation searched other than minimum documentation to the extent that such documentation searched other than minimum documentation to the extent that such documentation searched other than minimum documentation to the extent that such documentation searched other than minimum documentation to the extent that such documentation searched other than minimum documentation to the extent that such documentation searched other than minimum documentation to the extent that such documentation searched other than minimum documentation to the extent that such documentation searched other searched other searched se	s)
Minimum documentation searched (classification system followed by classification symbols U.S.: 166/207,55.7,380,384  Documentation searched other than minimum documentation to the extent that such documentation searched other than minimum documentation to the extent that such documentation searched other than minimum documentation to the extent that such documentation symbols are such as the such documentation to the extent that such documentation symbols are such as the such a	
Documentation searched other than minimum documentation to the extent that such documentation	
Documentation searched other than minimum documentation to the extent that such documentation	
	ents are included in the fields searched
	ents are included in the fields searched
	in the neigs searched
Electronic data base consulted during the international search (name of data base and, where Please See Continuation Sheet	
Electronic data base consulted during the international search (name of data base and, where Please See Continuation Sheet	
	practicable, search terms used)
C. DOCUMENTS CONSIDERED TO BE RELEVANT	
Category Citation of document, with indication when are	
A US 2005/0056433 A1 (RING et al) 17 March 2005 (17/03/05), see entire doci	nt passages Relevant to claim N
(1//03/03), see entire doci	ument. 1-75
	1
	İ
1	į
	1
	i
	1
	1
	1
	1
	l
	1
	I
	]
Post i	
Further documents are listed in the continuation of Box C.  Special categories of cited december 1.	ly annex.
after documents:	liched about
document defining the general state of the art which is not considered to be of date and not in considered to be of principle or theory to	lished after the international filing date or priority flict with the application but cited to understand the underlying the invention
earlier application or patent published on or after the international filing date  "X"  document of particular considered movel or	ular relevance; the claimed invention cannot be cannot be considered to involve an inventive step
establish the publication date of another circina or other which is cited to	is taken andig
specified) document of particular special reason (as "Y" document of	lar relevance; the claimed invention cannot be
document referring to an oral disclosure, use exhibition and with one or more other	or such document is combined
document published prior to the international Given Assa.	skilled in the art
	f the same patent family
of the actual annual still	
of the actual completion of the international search Date of mailing of the international	ma66141
of the actual completion of the international search  Date of mailing of the international search	malibilative arch report
e of the actual completion of the international search  Lugust 2005 (02.08.2005)  Lugust 2005 (02.08.2005)  Lugust 2005 (02.08.2005)	ndiffersearch report
cof the actual completion of the international search  Lugust 2005 (02.08.2005)  e and mailing address of the ISA/US  Mail Stop PCT. Attr: ISA/US  Mail Stop PCT. Attr: ISA/US	
e of the actual completion of the international search  Lugust 2005 (02.08.2005)  e and mailing address of the ISA/US  Mail Stop PCT, Atm: ISA/US  Commissioner for Patents P.O. Box 1450  Date of mailing of the international search  Authorized officer  William P. Neuder	
cof the actual completion of the international search  Lugust 2005 (02.08.2005)  e and mailing address of the ISA/US  Mail Stop PCT, Atm: ISA/US  Commissioner for Patents	tolar

INTERNATIONAL SEARCH REPORT	International application No. PCT/US04/10762	··
	·	
Continuation of B. FIELDS SEARCHED Item 3:		
SAST Search terms: Radially adj expanding and cutting		
cutting		
n PCT/ISA/210 (extra sheet) (January 2004)		